

$^{208}\text{Pb}(^{36}\text{S},\text{X}\gamma)$ 2015Ch56

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Jun Chen	NDS 152, 1 (2018)	30-Sep-2017

2015Ch56: E= 215 MeV ^{36}S beam was produced using the combination of XTU tandem Van de Graaff accelerator and ALPI superconducting linear accelerator at the INFN Legnaro National Laboratory, Italy. Target was 99.7% enriched ^{208}Pb with a thickness of $300 \mu\text{g}/\text{cm}^2$ on a $20 \mu\text{g}/\text{cm}^2$ carbon backing. Fragments were separated and identified by the PRISMA spectrometer and γ rays were detected with the CLARA array of 25 EUROBALL escape-suppressed HPGe clover detectors. Measured E_γ , I_γ . Deduced levels, J,π . Comparisons with shell-model calculations.

 ^{38}P Levels

<u>E(level)[†]</u>	<u>J^π[‡]</u>
0	(2 ⁻)
380 <i>l</i>	(4 ⁻)

[†] From E_γ .

[‡] Proposed by 2015Ch56 based on shell-model predictions.

 $\gamma(^{38}\text{P})$

<u>E_γ</u>	<u>$E_i(\text{level})$</u>	<u>J_i^π</u>	<u>E_f</u>	<u>J_f^π</u>
380 <i>l</i>	380	(4 ⁻)	0	(2 ⁻)

 $^{208}\text{Pb}(^{36}\text{S},\text{X}\gamma)$ 2015Ch56Level Scheme